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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,329	08/16/2000	Mehmet Kemal Ozkan	RCA 89399	4689

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Joseph S Tripoli
Thomson Multimedia Licensing Inc
PO Box 5312
Princeton, NJ 08540

EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/29/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,329

Applicant(s)

OZKAN ET AL.

Examiner

Son P Huynh

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 16, lines 2-3, the term "said processor executes said application software to create a user selected program guide for display selected from a plurality of program guides for display" is not clear. Examiner interprets this as – said processor executes said application software to create a user selected program guide from a plurality of program guide for display- appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7, 17, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 6,357,043) and in view of Menand et al. (US 5,563,648).

Regarding claim 1, Ellis discloses electronic program schedule system 10 comprises receiver 12 for receives data stream from data provider. The data stream contains program schedule information for all television programs and other services available in the operator's geographical market. The data stream may additionally contain application software for implementing or updating the electronic program guide at the user site. The data stream is received by receiver 12 and passed to buffer or memory. Microcontroller 16 retrieves the stored program schedule information and stored software applications and passed them to video display generator (VDG) 23, which takes the digital program schedule information sent by the microcontroller 16 and converts it to an RGB format in accordance with the bit map for the particular screen display then being presented to the user on the television receiver 27 (col. 8, line 40-col. 10, line 29 and figure 1). The user uses the remote controller (figure 3) to select a icon on the screen and information associated with the selected icon is displayed (col. 11, line 1+). Inherently, Ellis teaches an apparatus (program schedule information system 10) for decoding packetized program data from at least a first source (data provider) to provide a program guide, comprising:
a processor (receiver 12) for acquiring program guide information (program schedule information) and for acquiring ancillary information (other services, and software

applications) in the packetized program data; the ancillary information including: a map for associating an object with a program guide information item (user selects a mode/icon to display information associated with the selected mode/icon);

a processor (16, 23) for executing a software application to create an object (icon/mode/program associated with the icon) and linking the object to a program guide information item; and

a display processor (VDG 23) for forming the composite image including the image object and the program guide information item to provide a program guide for display (figures 18+). Ellis further discloses user selects different icon on the display screen to command the system to perform function that links to the selected mode/icon.

Therefore, executable software application files are associated with objects. However, Ellis does not specifically disclose a directory of executable software application files.

Menand teaches directory of executable software application files (col. 1, line 59+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 7, Ellis teaches the program schedule information system 10 reads on the apparatus as claimed (figure 1) where the receiver 12 reads on the processor for acquiring program guide information and ancillary information as claimed (col. 8, line 40+ and figure 1); microcontroller 16 and VDG 23 read on the processor for executing the application software (figure 1 and col. 9, line 36+); and

Art Unit: 2611

VDG 23 reads on the display processor (figure 1 and col. 10, line 20+). Ellis also discloses application software for use in processing acquired program guide information (col. 8, line 61+); and associating the application software with a program guide information item to be process (perform function according to selected icon – col. 9, line 60+). However, Ellis does not specifically disclose a directory.

Menand teaches directory for associating the application software with a program guide information (col. 1, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 17, Ellis teaches the program schedule information system 10 reads on the apparatus as claimed where the receiver 12 reads on the processor for acquiring (figure 1 and col. 8, line 40+);

an object file reads on the services available in the operator geographical market such as software (col. 8, line 50+);

microcontroller 16 and VDG 23 read on the processor for using the ancillary information (figure 1 and col. 9, line 10+);

and associating the application software with a program guide information listed in the program guide information (perform function according to selected icon – col. 9, line 60+). However, Ellis does not specifically disclose a directory.

Art Unit: 2611

Menand teaches directory for associating the application software with a program listed in the guide information (col. 1, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 22, Ellis teaches the program schedule information system reads on the apparatus as claimed where the receiver 12 reads on the processor for acquiring program guide information and ancillary information (figure 1 and col. 8, line 40+); an object file reads on the services available in the operator geographical market such as program along with its schedule information (col. 8, line 50+, col. 33, line 40+); codes corresponding to a program's rating, parental guidance category, title or channel or unique digital identifier for each program along with its schedule information, read on the object file complexity level indicator (col. 33, line 40+, col. 25, line 45+); VDG 23 reads on the display processor (col. 10, line 15+); microcontroller 16 and VDG 23 for executing the ancillary information (figure 1 and col. 9, line 10+); Ellis further discloses the microcontroller prevents access to the locked program until an appropriate code is entered or the lockout is remove (see col. 21, line 15+) or disregarding (not displaying) programs associated with non-selected mode/categories and displaying only programs associated with selected mode/category- (col. 31, line 45+), and the user selects a mode/icon on the screen to display data associated with the selected icon (figures 6+). Necessarily, the processor

Art Unit: 2611

(microcontroller and VDG) for disregarding object files of complexity level exceeding a predetermined level and for creating an image object (mode, icon, data, program, message, etc.) from an object file and linking the image object to a program guide information item. However, Ellis does not specifically disclose a directory.

Menand teaches directory of object files associated with program guide information items (col. 1, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 23, the limitation of the storage medium as claimed correspond to the limitations the system as claimed in claim 1, and are analyzed as discussed in the rejection of claim 1.

Regarding claims 24-26, the limitations of method as claimed correspond to the limitations of system as claimed in claims 1, 7 and 17 and are analyzed as discussed in the rejection of claims 1, 7 and 17.

Regarding claim 27, Ellis teaches a method for forming packetized program data to be suitable for processing in a decoder (program schedule information system 10 – figure 1), comprising:

forming program guide information (program schedule information) and ancillary information including: object files associated with program guide information items; a map for associating the object files with the program guide information items (col. 8, line 40+);

incorporating the ancillary information and the program guide information into packetized data for output to a transmission channel (col. 8, line 40+). However, Ellis does not specifically disclose a directory.

Menand teaches directory of object files associated with program guide information items (col. 1, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

5. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 6,357,043) and in view of Chernock et al. (US 6,177,930).

Regarding claim 1, Ellis discloses electronic program schedule system 10 comprises receiver 12 for receives data stream from data provider. The data stream contains program schedule information for all television programs and other services available in the operator's geographical market. The data stream may additionally contain application software for implementing or updating the electronic program guide at the

Art Unit: 2611

user site. The data stream is received by receiver 12 and passed to buffer or memory.

Microcontroller 16 retrieves the stored program schedule information and stored software applications and passed them to video display generator (VDG) 23, which takes the digital program schedule information sent by the microcontroller 16 and converts it to an RGB format in accordance with the bit map for the particular screen display then being presented to the user on the television receiver 27 (col. 8, line 40-col. 10, line 29 and figure 1). The user uses the remote controller (figure 3) to select a icon on the screen and information associated with the selected icon is displayed (col. 11, line 1+). Inherently, Ellis teaches an apparatus (program schedule information system 10) for decoding packetized program data from at least a first source (data provider) to provide a program guide, comprising:

a processor (receiver 12) for acquiring program guide information (program schedule information) and for acquiring ancillary information (other services, and software applications) in the packetized program data; the ancillary information including: a map for associating an object with a program guide information item (user selects a mode/icon to display information associated with the selected mode/icon);

a processor (16, 23) for executing a software application to create an object (icon/mode/program associated with the icon) and linking the object to a program guide information item; and

a display processor (VDG 23) for forming the composite image including the image object and the program guide information item to provide a program guide for display (figures 18+). Ellis further discloses user selects different icon on the display screen to

command the system to perform function that links to the selected mode/icon.

Therefore, executable software application files are associated with objects. However, Ellis does not specifically disclose a directory of executable software application files.

Chernock teaches directory of executable software application files (directory 24 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Chernock in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 2, Chernock teaches the directory of executable software application files lists a file associated with a user interface controls (navigation content table, hot spot- col. 3, line 55+).

Regarding claim 3, Ellis teaches the object comprises an icon representing a user selectable item for display (figures 18+).

Regarding claim 4, Ellis teaches the ancillary information includes acquisition information for use in acquiring the ancillary information from a second source different to the first source (col. 8, line 44+); Ellis further discloses the set top box may be polled by the cable headend to determine if any orders are stored from transmission to the cable headend (col. 35, line 62+). Necessarily, the acquisition includes one of

destination address such as IP address or telephone/fax/videophone number in order to allow the head end to poll the information stored in set top box.

Regarding claim 5, Ellis teaches the display processor provides the program guide for display in response to a user selection input command selecting between available program guide (figures 6, 18+).

Regarding claim 6, Ellis teaches the ancillary information includes an object complexity level indicator (codes corresponding to a program's rating, parental guidance category, title or channel – col. 25, line 45+); and the apparatus disregards objects of complexity level exceeding a predetermined level (microcontroller prevents access to the locked program until an appropriate code is entered or the lockout is remove – see col. 21, line 15+).

Regarding claim 7, Ellis teaches the program schedule information system 10 reads on the apparatus as claimed (figure 1) where the receiver 12 reads on the processor for acquiring program guide information and ancillary information as claimed (col. 8, line 40+ and figure 1); microcontroller 16 and VDG 23 read on the processor for executing the application software (figure 1 and col. 9, line 36+); and VDG 23 reads on the display processor (figure 1 and col. 10, line 20+). Ellis also discloses application software for use in processing acquired program guide information (col. 8, line 61+); and associating the application software with a program guide

Art Unit: 2611

information item to be process (perform function according to selected icon – col. 9, line 60+). However, Ellis does not specifically disclose a directory.

Menand teaches directory for associating the application software with a program guide information (col. 1, line 59+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Menand in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 8, Ellis discloses the transmitted data stream contain application software for implementing or updating the electronic program guide at the user site (col. 8, lines 62+). Ellis further discloses the received application software controls the program schedule system (col. 9, line 20+). Necessarily, the application software comprises at least one of a Java file, an Active X file, and a decoder supported software language file.

Regarding claim 9, Ellis teaches the processor executes the application software to create a program guide for display (col. 8, line 61+).

Regarding claim 10, the system allows user to navigate different submenu such as time periods, categories, etc (col. 11, line 19+). Necessarily, the processor creates a special program guide (categories guide, time period, etc.) for display and the special program

Art Unit: 2611

guide includes list of program collated based on at least one of a particular period of program broadcast, a particular category of programs (figures 18+).

Regarding claim 11, Ellis teaches the particular category of programs includes programs with, at least one of: a particular theme or topic (premium services, stock, stories, sports, etc. figures 10, 32-35), particular User defined criteria (favorite channel – figure 8).

Regarding claim 12, Ellis teaches the processor (microcontroller 16 and VDG 23) creates a special program guide from program guide information acquired from a broadcast source (col. 8, line 40+).

Regarding claim 13, Ellis teaches the processor creates a special program guide comprising multimedia services listing one of: a DVD/VCR program available for play (replays of prior games of the selected teams or players –col. 31, line 14+, col. 34, line 46+); a pre-stored fax/phone number for access (toll free “800” number 0 col. 35, line 40+), a home appliance control function (control the TV receiver 27 to display different screen – figures 36A+).

Regarding claim 14, Ellis teaches in creating a special program guide, the processor acquires program guide information by establishing bi-directional communication with a

Art Unit: 2611

second source (services provider) using a telephone/fax/videophone number (e.g. toll free "800" number, col. 35, line 20+).

Regarding claim 15, Chernock teaches the directory of executable software application files lists a file associated with a user interface controls (navigation content table, hot spot- col. 3, line 55+).

Regarding claim 16, Ellis discloses microcontroller 16 and VDG 23 uses application software and program schedule information to generate and presents program guide on the screen (col. 9, line 20+). Ellis also discloses the user selects a particular mode/icon on the screen to display data associated with the selected mode/icon (col. 11, line 20+). Necessarily, the processor (microcontroller and VDG) executes the application software to create a User selected program guide from a plurality of program guides for display.

Regarding claim 17, Ellis teaches the program schedule information system 10 reads on the apparatus as claimed where the receiver 12 reads on the processor for acquiring (figure 1 and col. 8, line 40+);

an object file reads on the services available in the operator geographical market such as application software (col. 8, line 50+);

microcontroller 16 and VDG 23 read on the processor for using the ancillary information (figure 1 and col. 9, line 10+); and

Art Unit: 2611

associating the application software with a program guide information listed in the program guide information (perform function according to selected icon – col. 9, line 60+). However, Ellis does not specifically disclose a directory.

Chernock teaches directory (directory 24 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Chernock in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 18, Ellis teaches the application software performs at least one of the functions: command the apparatus to tune to a particular broadcast video/audio channel (col. 15, line 25+).

Regarding claim 19, Ellis discloses the transmitted data stream contain application software for implementing or updating the electronic program guide at the user site (col. 8, lines 62+). Ellis further discloses the received application software controls the program schedule system (col. 9, line 20+). Necessarily, the application software comprises at least one of a Java file, an Active X file, and a decoder supported software language file.

Regarding claim 20, Chernock teaches the directory lists a file associated with a user interface controls (navigation content table, hot spot- col. 3, line 55+).

Regarding claim 21, Ellis teaches the ancillary information includes an object complexity level indicator (codes corresponding to a program's rating, parental guidance category, title or channel – col. 25, line 45+ or unique digital identifier for each program along with its schedule information- col. 33, line 40+); and the apparatus disregards objects of complexity level exceeding a predetermined level (microcontroller prevents access to the locked program until an appropriate code is entered or the lockout is remove – see col. 21, line 15+ or disregarding programs associated with non-selected mode/categories and displaying only programs associated with selected mode/category- col. 31, line 45+).

Regarding claim 22, Ellis teaches the program schedule information system reads on the apparatus as claimed where the receiver 12 reads on the processor for acquiring program guide information and ancillary information (figure 1 and col. 8, line 40+); an object file reads on the services available in the operator geographical market such as program along with its schedule information (col. 8, line 50+, col. 33, line 40+); codes corresponding to a program's rating, parental guidance category, title or channel or unique digital identifier for each program along with its schedule information, read on the object file complexity level indicator (col. 33, line 40+, col. 25, line 45+); VDG 23 reads on the display processor (col. 10, line 15+); microcontroller 16 and VDG 23 for executing the ancillary information (figure 1 and col. 9, line 10+); Ellis further discloses the microcontroller prevents access to the locked

Art Unit: 2611

program until an appropriate code is entered or the lockout is remove (see col. 21, line 15+) or disregarding (not displaying) programs associated with non-selected mode/categories and displaying only programs associated with selected mode/category- (col. 31, line 45+), and the user selects a mode/icon on the screen to display data associated with the selected icon (figures 6+). Necessarily, the processor (microcontroller and VDG) for disregarding object files of complexity level exceeding a predetermined level and for creating an image object (mode, icon, data, program, message, etc.) from an object file and linking the image object to a program guide information item. However, Ellis does not specifically disclose a directory.

Chernock teaches directory (directory 24 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Chernock in order to provide an organized table of files thereby allowing desired file to be located easily.

Regarding claim 23, the limitation of the storage medium as claimed correspond to the limitations the system as claimed in claim 1, and are analyzed as discussed in the rejection of claim 1.

Regarding claims 24-26, the limitations of method as claimed correspond to the limitations of system as claimed in claims 1, 7 and 17 and are analyzed as discussed in the rejection of claims 1, 7 and 17.

Regarding claim 27, Ellis teaches a method for forming packetized program data to be suitable for processing in a decoder (program schedule information system 10 – figure 1), comprising:

forming program guide information (program schedule information) and ancillary information including: object files associated with program guide information items; a map for associating the object files with the program guide information items (col. 8, line 40+);

incorporating the ancillary information and the program guide information into packetized data for output to a transmission channel (col. 8, line 40+). However, Ellis does not specifically disclose a directory.

Chernock teaches directory (directory 24 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis to use the teaching as taught by Chernock in order to provide an organized table of files thereby allowing desired file to be located easily.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2611

Tsukidate et al (US 6,414,720) teaches digital broadcasting system using virtual channels.

Williams et al. (US 6,157,411) teaches method and apparatus for compiling and repository of entertainment system data from multiple sources.

Okamura et al. (US 6,701,524) teaches interactive data transmitting apparatus, data receiving apparatus.

Hanaya et al. (US 6,519,009) teaches program switching device and method.

Eyer et al. (US 6,160,545) teaches multi-regional interactive program guide for television.

Kosteski et al. (US 5,734,589) teaches digital entertainment terminal with channel mapping.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2611

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son P. Huynh
March 16, 2004



VIVEK SRIVASTAVA
PRIMARY EXAMINER